

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number  
**WO 2005/032480 A2**

(51) International Patent Classification<sup>7</sup>: **A61K**

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(21) International Application Number:  
**PCT/US2004/032375**

(22) International Filing Date: 4 October 2004 (04.10.2004)

(25) Filing Language: English

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

(30) Priority Data:  
60/508,748 3 October 2003 (03.10.2003) US

**Published:**

— without international search report and to be republished upon receipt of that report

(71) Applicant and

(72) Inventor: **BOSTON, Judith [US/US]; 1601 N. Sepulveda Blvd. #387, Manhattan Beach, CA 90266 (US).**

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

**WO 2005/032480 A2**

(54) Title: METHODS, COMPOSITIONS,, APPARATUSES CONTAINING TETRAMERIC OXYGEN

(57) Abstract: Compositions and methods of treating conditions requiring oxygen or resulting from molecular damage induced by reactive metabolites, hypoxia or ischemia. Tetrameric oxygen is administered alone as an aqueous solution or in conjunction with additional agents. Treatable conditions include cancer, viral diseases, ocular disease, autoimmune, inflammatory disease and other conditions requiring improved oxygenation.